

Honda R&D Technical Review

April 2009

List of Chapters:

Special Edition for Fuel Cell Vehicle

Style and Design of FCX CLARITY
Fuel Cell Powertrain for FCX Clarity
New Fuel Cell Stack for FCX Clarity
Electric Shift System for FCX Clarity
Heated and Cooled Seat for FCX Clarity
PDU for FCX Clarity
Development of Lithium Ion Battery System for Fuel Cell Vehicle
Development of Friction Stir Welding Technology for Subframe for Fuel Cell System
Development of Fuel Cell Coolant
Electric Drive Motor for Fuel Cell Vehicle FCX Clarity
Hydrogen Visualization Using Multi-photon Ionization

Special Editon for INSIGHT

Development of GLOBAL Hybrid Car Aimed at Popularization
Techuology for Increased Fuel Efficiency in New INSIGHT
Development of Power Control Unit for 2009 Model Year INSIGHT

Introduction of new technologies

Development of 2009 Model Year U.S. FIT
Development of FREED Assisted Mobility Vehicle
Super Ultra Flat Torque Converter with Multi Plate Lock-up Clutch

Research on FM Band Radio Noise Visualization System for Hybrid Vehicle

Development of Brake-by-Wire System for Super Sport Motorcycles

Development of Small-sized Multilayer Fuel Tank for Off-road Motorcycles and ATVs

Rearward Visibility Simulation System of Motorcycle Rearview Mirrors

Introduction of Kart Racing Engine Using 4-stroke General Purpose Engine

Development of Enhanced Honeycomb Barrier Finite Element Model for Rear Crash Simulations

Improved Method to Assess Spot Weld Rupture in LS-DYNA using Solid Element Assemblies

Development for New Bumper Face Material in Asia-Pacific Region

Technical papers

Vaporization Characteristic of High-ethanol Gasoline (E85) and Cold Startability

Effect of Bio Diesel Fuel on Sludge Prevention Performance of Engine Oil

Model Based Air-path Management Control for Clean Diesel Engine

Measurement of Local Air/Fuel Ratio and Evaluation of Accuracy of Engine Simulation
Using Micro-Cassegrain Sensor

Mechanism of Torque Capacity Change during Operation of AT with Focus on Friction Properties

Research on Longitudinal Vibration of MT Vehicle at Clutch Engagement

Method for Three-dimensional Evaluation of Surface Form of Metal Rings for CVT
Metal Pushing V-belts

Psychological Effects of Use of Electric Scooter

